

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference  755-322/DPC	<b>FOR FURTHER ACTION</b>  see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No.  PCT/CA2004/000437	International filing date (day/month/year)  24/03/2004	(Earliest) Priority Date (day/month/year)  25/03/2003
Applicant  I. E. DU PONT CANADA COMPANY		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (See Box II).

3. ☐ Unity of invention is lacking (see Box III).

**4. With regard to the title,**

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

**5. With regard to the abstract,**

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

**6. With regard to the drawings,**

a. the figure of the drawings to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

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International application No.

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Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

There is provided a process for joining a gas diffusion layer (15) to a separator plate (5) of an electrochemical cell. The gas diffusion layer comprises a porous body that allows a reactant gas to diffuse through the gas diffusion layer. The separator plate comprises at least one landing surface formed on a surface of the separator plate, and the separator plate and landing surface comprising a polymer and conductive filler. The process includes the step of welding the landing surface to the gas diffusion layer by impregnating some of the polymer on the landing surface within a portion of the porous body.

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01M8/02 B23K11/00 B23K20/00 B29C65/44 B29C65/64  
C09J5/06

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01M B29C C09J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 326 017 A (* MOTOROLA INC) 9 December 1998 (1998-12-09) page 5, line 15 - page 7, line 8 -----	1-22
X	US 5 733 678 A (LEDJEFF ET AL) 31 March 1998 (1998-03-31) column 1, line 58 - column 3, line 33 column 7, line 41 - column 9, line 8 -----	1-22
A	PATENT ABSTRACTS OF JAPAN vol. 012, no. 398 (C-538), 21 October 1988 (1988-10-21) & JP 63 140095 A (EBARA CORP; others: 01), 11 June 1988 (1988-06-11) abstract ----- -/--	1-22

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- \*&\* document member of the same patent family

Date of the actual completion of the international search

18 April 2005

Date of mailing of the international search report

28/04/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Standaert, F

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 189 297 A (MITSUI TAKEDA CHEMICALS, INC) 20 March 2002 (2002-03-20) paragraphs '0006! - '0013!, '0035! - '0041! -----	13
A	WO 00/44005 A (E.I. DU PONT DE NEMOURS AND COMPANY) 27 July 2000 (2000-07-27) page 4, line 14 - page 5, line 9 -----	1-22

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/CA2004/000437

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